



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/085,285	02/24/2002	Frederic Leuba	ICB-0049	1142
24203	7590	11/29/2006	EXAMINER	
GRIFFIN & SZIPL, PC SUITE PH-1 2300 NINTH STREET, SOUTH ARLINGTON, VA 22204			PHAN, THANH S	
			ART UNIT	PAPER NUMBER
			2841	

DATE MAILED: 11/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

A

<b>Office Action Summary</b>	<b>Application No.</b> 10/085,285	<b>Applicant(s)</b> LEUBA ET AL.	
	<b>Examiner</b> Thanh S. Phan	<b>Art Unit</b> 2841	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 29 March 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1,5-8,10-17,20-23,28 and 29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 5-8, 10-17, 20-23 and 28-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1,5-8, 10-17, 20-23 and 28-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Schafroth [US 6,124,649] in view of Applicant Admitted Prior Art; AAPA hereinafter; and Lin [US 6,562,709]. Schafroth teaches a timepiece including particular a functional unit (not explicitly in numbered) including magnetized masses 12, an electronic module 80 including a support with conductive paths connected to at least one integrated circuit 81, wherein at least the conductive paths are in proximity to said functional unit, wherein the support is of synthetic or composite material, wherein the electronic module further includes at least a discrete electronic unit, wherein the discrete electronic unit is a capacitor 82-84, wherein said functional unit is a microgenerator, wherein said microgenerator includes a rotor (not explicitly numbered) including two flanges each having substantially the shape of a disc and each carrying, on its face facing the other flange, an even number (6) of magnetized masses, said electronic module including at least a stator coil 20-22 fixed to said support and partially inserted between the two flanges, wherein the conductive paths of said support connecting said at least one coil to said integrated circuit (Col. 2, lines 57+; Col. 3, lines 1+; FIG. 2). Schafroth does not explicitly teach the conductive paths are made of

Art Unit: 2841

essentially non-magnetic material, wherein said paths include a protective layer and an adherence underlayer formed of a non-magnetic material, wherein the non-magnetic material is a nickel based alloy. Lin teaches an apparatus where alternating layers of materials are utilized, wherein the layers are made of non-magnetized layers, wherein the non-magnetized material are material such as nickel, palladium or gold [column 11; lines 47 +]. Lin further teaches a protective layer of non-magnetic material [column 11, lines 56-59] and an adhesive to attach the conductive trace to the chip/substrate [column 12, lines 32-35]. In addition, within the Applicant's Disclosure, it has been established that in the prior art, said conductive paths are typically made in two steps. The first step consists in depositing a layer of a very good electrically conductive material, such as a copper or gold based alloy. The second step then consists in depositing a fine protective layer, on the conductive layer, formed of a nickel-based alloy with good resistance to oxidization. Sometimes an underlayer is deposited on the substrate before depositing the conductive layer. This underlayer, usually formed of a nickel-based alloy, allows the adherence of the conductive layer to the substrate to be improved (Disclosure, page 2, lines 29+). It would have been obvious to a person skilled in the art at the time of the invention to adapt the conductive paths design of Lin with Schafroth for the purpose of facilitating conductivity and providing circuitry thereof.

### ***Response to Arguments***

In response to the Request for Continued Examination (RCE) filed on 03/29/06 and the applicant's arguments have been fully considered but they are not persuasive. Applicant argues: Schafroth fails to teach or suggest that the conductive paths are

Art Unit: 2841

made of “essentially non-magnetic material.” Schafroth teaches the structure of the conductive paths as claimed. Schafroth further teaches, as acknowledged by applicant, the use of non-magnetic materials used with the watch drive. Lin teaches the use of non-magnetic materials used for conductive paths with a non conductive coating thereon, see Lin column 11 lines 47-59. A skilled artisan would have been motivated to select one of the non-magnetic materials of Lin for the conductive paths to improve conductivity. Schafroth in combination with Lin does not teach the conductive paths disposed in proximity with the micro-generator being non-magnetic to prevent braking the micro-generator. Lin teaches the use of non-magnetic materials for the conductive paths, see Lin column 11, lines 47-59. Lin is “silent” about the ferromagnetic properties of nickel, palladium and gold. Applicant acknowledges the materials used by Lin are non-magnetic, see applicant’s arguments, page 17, lines 4-6. Lin does not teach the use of a nickel based alloy, as recited in claims 10 and 11. The admitted prior art discloses the use of a nickel based alloy, see disclosure page 2, lines 29+.

For the foregoing reasons, the claims continue to be anticipated by the combinations of the Schafroth reference. Accordingly, the examiner’s rejection is upheld.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thanh S. Phan whose telephone number is 571-272-2109. The examiner can normally be reached on M-F 9:00-5:00.

Art Unit: 2841

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kamand Cuneo can be reached on 571-272-1957. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

tsp



K Cuneo  
SPE 2841